DESCRIPTION OF MAP UNITS



K Grapevine Wash Formation (Tertiary? and Cretaceous?) -Fanglomerate, conglomerate, and sandstone found only in the Bull Valley Mountains, where it conformably overlies he Iron Springs Formation, and is unconformably overlain by the Claron Formation u Cretaceous rocks, undivided (Upper Cretaceous) - Fluvial to shallow marine sandstone, shale, mudstone, and pelletal limestone; locally contains thin to thick beds of bituminous coal; includes Straight Cliffs Formation, Walyweap Sandstone, and Kaiparowits Formation, and unnamed rocks east of the Gunlock fault in the Pine Valley Mountains that may correlate with the Iron Springs Formation Rc Chinle Formation (Upper Triansic) - Varicolored fluvial and lacustrine rocks, generally sandy near top; limy, muddy, and bentonitic in middle, and sandy and conglomeratic near base; has been divided into several members, which are not uniformly distributed throughout the map area; the Shinarump Member at the base consists of medium-grained to conglomeratic sandstone containing carbonized plant debris, fragmental silicitied wood, scattered uranium and vanadium deposits, and picturesque liesegang-banded sandstone; higher members locally contain manganese or barite-bearing nodules and traces of precious and base metals R m Moenkopi Formation (Middle? and Lower Triassic) - Marginal marine and marine reddish-brown siltstone, mudstone, and calcareous sandstone, with limestone and evaporite tongues that thicken westward; in the western part of the area, divided into six members, an upper red member and Shnabkaib Member, comprised of redbeds, gypsiferous siltstone, and bedded gypsum; a medial red member and Virgin Limestone Member, consisting of redbeds and thin-bedded dolomitic mudstone and limestone; and a lower red member and Timpoweap Member, consisting of redbeds and impure limestone, chert, and limestone-pebble conglomerate; high-paraffin oil has been produced from the Timpoweap Member in the Virgin oil field east of St. George Steep fault; dashed where uncertainly located, dotted where concealed gravity gradient, barbs point towards gravity low, L = center of low CORRELATION OF MAP UNITS **VOLCANIC ROCKS** METAMORPHIC ROCKS Proterozoic X? [pCc

UTAH
QUADRANGLE LOCATION

Plate 1.--Geologic Map of the Cedar City 1° X 2° Quadrangle, Utah compiled by Gary R. Winkler